

CLAIMS

1 A transconductance circuit intended to convert a differential input voltage, supplied as two signals on two inputs, into a differential output current, characterized in that, where each of the two signals of said differential input voltage is supplied to each input through a follower transistor connected to said input by its emitter and receives said signal on a control
5 electrode, each of the two inputs of the transconductance is connected to a respective current source that is dynamically controlled by the other input of the transconductance, said current source being such that the current supplied to each input by said current source eliminates current variations caused by voltage variations of the input voltage signal.

10 2 A transconductance circuit as claimed in claim 1, wherein the transconductance circuit comprises two sides, each side comprising an input, an output, at least a first transistor having a control electrode coupled for receiving a bias voltage, a first electrode connected to said output and a second electrode connected to said input, a second transistor having a first electrode and a control electrode coupled in common to said input and a second electrode
15 connected to a power supply terminal.

3 A transconductance circuit as claimed in claim 2, wherein said first and second transistors are of the same size.

20 4 A transconductance circuit as claimed in one of claims 2 and 3, wherein each side further includes a third transistor of the same size as said second transistor, said third transistor has a control electrode coupled to said first transistor and control electrodes of said second transistor, a first electrode connected to the output of the other side and a second electrode connected to said power supply terminal.

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5 A transconductance circuit as claimed in one of the claims 2 to 4, wherein said current source includes a current mirror mirroring the current passing through said second transistor with a gain of two.

6 A transconductance circuit as claimed in claim 5, wherein said current mirror includes
a mirror transistor of twice the size of said second transistor, said mirror transistor having a
control electrode connected to the first and control electrodes of said second transistor, a first
electrode connected to the input of the other side and a second electrode connected to said
5 power supply terminal.

7 A chip intended to be implemented in a transceiver including at least a
transconductance as claimed in one of the claims 1 to 6.

10 8 A transceiver of radio-frequency signals including at least one chip as claimed in
claim 7.